CLAIM LISTING

Please amend the claims as follows:

1.   (Currently Amended) A method for deterministic registration for communication networks comprising:

transmitting a node register command over a network, the node register command comprising[[:]] a ~~first plurality of bits and a second~~ plurality of bits, the ~~first and second~~ plurality of bits addressing a range of <u>potential</u> nodes ~~that should respond to the node register command~~; ~~and~~

<u>determining, by a particular node and based upon the plurality of bits, whether the particular node corresponds to the range of potential nodes;</u>

<u>determining, by the particular node and based upon the plurality of bits and an identifier of the particular node, a corresponding time delay;</u>

~~plurality of time slot delays; during each of the plurality of time slot delays,~~

listening to the network for a response from a node in the range of nodes~~, the node determined by each of the plurality of time slot delays~~; ~~and~~

<u>determining, based upon the time slot delay in which the response is received, the particular node in the range of nodes from which the response was received; and</u>

responsive to detecting [[a]]<u>the</u> response, ~~determining a responding node corresponding to the response and designating the responding node as registered~~<u>registering the node.</u>

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2. (Currently Amended) The method of claim [[1]]29, wherein the second plurality of bits are padded with zeros.

3. (Currently Amended) The method of claim [[1]]29, wherein the node register command further comprises a third plurality of bits.

4. (Currently Amended) The method of claim 1 further comprising:

creating a confirmation packet ~~comprising a second plurality of time slot delays~~;

transmitting the confirmation packet; and

during ~~each of the second plurality of~~ the corresponding time slot delay[[s]], transmitting a signal based on a registration status of ~~a corresponding~~ the particular node, the signal being a confirmation of the registration of the ~~corresponding~~particular node.

5. (Currently Amended) The method of claim 1 further comprising, ~~during each of the plurality of~~ the time slot delay[[s]], calibrating a receiver during a first portion of ~~each of the plurality of~~ the time slot delay[[s]].

6. (Currently Amended) The method of claim 1, wherein ~~each of the plurality of~~the time slot delay[[s]] is a response period during which at most one node may transmit a message in response to the node register command.

7.   (Currently Amended) The method of claim 4 further comprising, during ~~each of the second plurality of~~ the time slot delay[[s]], not transmitting a signal if the corresponding node is not registered.

8.   (Currently Amended) A method for registering during a deterministic registration process comprising:

at a node, receiving a node register command addressing a range of nodes, ~~the node register command comprising a plurality of time slot delays~~;

determining whether the node is in the range of addressed nodes;

responsive to determining that the node is in the range of addressed nodes, <u>determining the proper time slot delay, based upon the addressed range of nodes and the node's serial number, and</u> waiting for [[a]]<u>the determined</u> ~~proper~~ time slot delay~~, the proper time slot delay being one of the plurality of time slot delays, the proper time slot delay corresponds to the node~~; and

transmitting a message during the proper time slot delay, the message being a response to the node register command.

9.   (Original) The method of claim 8, wherein the message is a `true` signal.

10.   (Original) The method of claim 8 further comprising setting a tentatively registered flag.

11.   (Currently Amended) The method of claim 8 further comprising:

receiving a confirmation packet comprising a second plurality of <u>bits identifying the</u>
<u>packet as the confirmation packet</u>~~the time slot delays~~;

<u>automatically</u> waiting for an ~~assigned~~ <u>a second time</u> slot delay <u>based upon a node's serial</u>
<u>number</u>, ~~the assigned time slot delay being one of the second plurality of time slot delays~~;

during the ~~assigned~~ time slot delay, listening for a confirmation message; and responsive
to detecting a confirmation message, setting a registered flag.

12.   (Original) The method of claim 11, wherein the confirmation message is a `true`
signal.

13.   (Currently Amended) A computer-readable storage medium having stored
thereon computer instructions that, when executed by a computer, cause the computer to:

transmit a node register command over a network, the node register command
comprising[[:]] a ~~first~~ plurality of bits ~~and a second plurality of bits, the first and second plurality~~
~~of bits addressing~~ <u>indicating</u> a range of nodes ~~that should respond to the node register command~~,
<u>wherein the existence of each of the nodes in the range of nodes is unknown to a device</u>
<u>transmitting the node register command</u>; ~~and~~

<u>listen during each of</u> a plurality of time slot delays <u>for a response message</u>, each of the
plurality of time slot delays ~~designated for~~ <u>identifying</u> one [[of]] <u>node in</u> the range of nodes<u>, the</u>
<u>response message comprising an identifier identifying the responding node</u> ~~to transmit a response~~
~~message~~; <u>and</u>

~~during each of the plurality of time slot delays, listen to the network for the response~~
~~message~~; and

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associating the identifier identifying the responding node with one of the nodes in the range of nodes, based upon the time slot delay in which the response message was received; and

responsive to detecting [[a]]the response message, ~~determine a responding one of the range of nodes that transmitted the response message and designate the one of the range of nodes as registered~~ registering the node and its associated identifier.

14.   (Currently Amended) The computer-readable storage medium of claim [[13]]30, wherein the second plurality of bits is padded with zeros.

15.   (Currently Amended) The computer-readable storage medium of claim 13, wherein the computer instructions that transmit the node register command further comprise computer instructions that, when executed by a computer, cause the computer to: create a confirmation packet ~~comprising a second plurality of time slot delays~~; transmit the confirmation packet; and during each each time slot delay for which a response message was received~~of the second plurality of time slot delays~~, transmit a confirmation message to indicate confirmation of the registration of a corresponding node, the corresponding node being one of the range of nodes.

16.   (Original) The computer-readable storage medium of claim 13, wherein the computer instructions that transmit the node register command further comprise computer instructions that, when executed by a computer, cause the computer to: during a portion of each of the plurality of time slot delays, determine a level of noise in the network; and set a threshold for a good signal, the threshold being above the level of noise.

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17.   (Original) The computer-readable storage medium of claim 13, wherein each of the plurality of time slot delays comprises a calibration period and a response transmission period.

18.   (Currently Amended) A computer-readable storage medium having stored thereon computer instructions that, when executed by a computer, cause the computer to:

receive a node register command addressing a range of nodes, ~~the node register command comprising a plurality of time slot delays~~;

determine whether to respond to the node register command, <u>based upon a responding node's inclusion in the range of nodes addressed</u>; and

responsive to determining to respond to the node register command, transmit a message during ~~an assigned~~ time slot delay <u>calculated based upon the responding node's location in the range of nodes and an identifier associated with the node</u>, ~~the assigned time slot delay being one of the plurality of time slot delays, the message being a response to the node register command~~.

19.   (Original) The computer-readable storage medium of claim 18, wherein the computer instructions that receive the node register command further comprise computer instructions that, when executed by a computer, cause the computer to set a tentatively registered flag.

20.   (Currently Amended) The computer-readable storage medium of claim 18, wherein the computer instructions that receive the node register command further comprise

computer instructions that, when executed by a computer, cause the computer to: receive a confirmation packet ~~comprising a second plurality of time slot delays~~;

wait for ~~an assigned~~ time slot delay, the ~~assigned~~ time slot delay ~~being one of the second plurality of time slot delays~~ calculated based upon the responding node's location in the range of nodes;

during the ~~assigned~~ calculated time slot delay, listen for a confirmation message; and

responsive to detecting a confirmation message during the time slot delay, set a registered flag.

21.   (Original) The computer-readable storage medium of claim 20, wherein the confirmation message is a `1` signal.

22.   (Original) The computer-readable storage medium of claim 18, wherein the message is a `1` signal.

23.   (Cancelled)

24.   (Currently Amended) A system for deterministic registration for communication networks comprising:

[[a]]means for transmitting a node register command over a network, the node register command ~~addressing a plurality~~ identifying a range of nodes ~~that should respond to the node register command, the node register command comprising a plurality of time slot delays, each of~~

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~~the plurality of time slot delays designated for one of the plurality of~~ addressed nodes to transmit a ~~response message;~~

means for determining, based upon the range of nodes and a node identifier, whether the node is within the range and a corresponding time slot delay for sending a response message;

[[a]]means for detecting a transmission of [[a]]the response message during ~~each of~~ the ~~plurality of~~ time slot delay[[s]];

[[a]]means for determining [[a]]the responding node ~~responsive to detecting a response message~~based upon the time slot delay in which the message is received and the range of nodes, the responding node being one of ~~the plurality of addressed~~ identified nodes; and

[[a]]means for designating the responding node as registered.

25.   (Currently Amended) The system of claim 24 further comprising: [[a]]means for creating a confirmation packet comprising a ~~second plurality of time slot delays~~a confirmation identifier in the time slot delay; and [[a]]means for transmitting the confirmation packet; ~~and a means for transmitting a confirmation message to indicate confirmation of the registration of the responding node during an appropriate one of the second plurality of time slot delays.~~

26.   (Currently Amended) The system of claim 24 further comprising a means for calibrating a receiver during ~~a portion of each of the plurality of~~the time slot delay[[s]].

27.   (Currently Amended) A system for registering during a deterministic registration process comprising:

[[a]]means for receiving a node register command, the node register command addresses a plurality of nodes, ~~the node register command comprising a plurality of time slot delays~~;

[[a]]means for determining whether to respond to the node register command; ~~and~~

means for calculating a time slot delay corresponding to a particular node based upon the plurality of nodes addressed and the particular node's serial number; and

[[a]]means for transmitting a message during ~~an assigned~~the calculated time slot delay in response to determining to respond to the node register command, ~~the assigned time slot delay being one of the plurality of time slot delays,~~ the message being a response to the node register command.

28.   (Currently Amended) The system of claim 27 further comprising: [[a]]means for receiving a confirmation packet, the confirmation packet comprising ~~a second plurality of time slot delays~~a confirmation indicator in the time slot delay; and [[a]]means for detecting a confirmation message during an assigned time slot delay~~, the assigned time slot delay being one of the plurality of time slot delays; and a means for setting a registered flag in response to detecting the confirmation message~~.

29.   (New) The method of claim 1, where in the plurality of bits comprises a first plurality of bits and a second plurality of bits.

30.   (New) The method of claim 13, where in the plurality of bits comprises a first plurality of bits and a second plurality of bits.

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31.   (New) The method of claim 1, further comprising:

during a first portion of the time slot delay, determining a level of ambient noise in a network;

determining a ceiling of the level of ambient noise;

setting a threshold for a good signal to a predetermined level above the ceiling of the level of ambient noise; and

during a second portion of the time slot delay, listening to the network for a signal.